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ABSTRACT

To understand the achievement gap between Black and White students, test performance on Delaware statewide assessments was studied. The study focused on Black-White test score gaps in reading, mathematics, and writing across grades 3, 5, 8, and 10 by achievement level, item format, and gender within each racial/ethnic group over time. The assessments considered were the Interim Assessment Program (IAP) and the Delaware Student Testing Program (DSTP) assessments, in which the Stanford Achievement Series, 9th Edition tests are embedded. As in previous research, this study found that the test scores of Black students lag behind those of White students for reading, mathematics, and writing in grades 3, 5, 8, and 10 based on Delaware longitudinal data and that these gaps remained similar for more than 6 years on both norm-referenced tests and performance assessments. Results also show that the largest gap was in mathematics and the smallest in writing. The Black-White achievement gap became much wider for the low-achieving and high-achieving students in the bottom and top 10% and 25% of the score distributions. Black students seemed to perform better in developing their responses than in selecting answers from choices provided. Results also show that the achievement gap is smaller for females than for males for reading and mathematics, but larger for writing. (Contains 8 tables and 19 references.) (SLD)

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An Analysis of Achievement Gap between Black and White Students on a Statewide Assessment

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Introduction

Achievement gap between black and white students has been one of the critical issues in education for decades. In 1996, a comprehensive analysis of the 50 states warned that the achievement gap is widening again after decades of progress (Lynn Olsen, 1996). The Report by the Education Trust says "The fact that progress in minority achievement has stopped at a time when minorities comprise a growing portion of the student population should sound a wake-up call to the whole country." Researchers have documented how black students lag behind white students in performance on standardized tests since 1960s (Hoff, 2000). The span appeared to be narrowing throughout the 1980s, but it has begun to widen again on NAEP and other measures since then. Hoff also reported (2000) that thirty years of statistics from the National Assessment of Educational Progress (NAEP) show that overall achievement has increased gradually in reading and mathematics and stayed about the same in science, the gap between black and white students, however, has been widening the past 12 years. The findings from the NAEP math results point to signs that gains of test scores made by black students in 1970s and 1980s are starting to slip away. At age 17, the reading achievement of black students was lower in 1999 than it was in 1988 (Nettle, 2000). The NAEP trend fits with scores on other standardized tests. For example, the disparity in SAT scores between black and white students increased by 3 points on verbal and 8 points on mathematics over the past decade.

Based on a variety of research studies, no single explanation for the achievement gap will ever emerge. Recent evidence suggests that chronic poverty, academic coursework, peer pressure, school funding, parent practices, teacher expectation, and psychological and cultural influences all play a role for lagging minority test performance (Viadero, 2000). The National Task Force on Minority High Achievement Report (1999) calls that narrowing the achievement gap between black and white students is becoming urgent and a priority in states and districts nationwide. A group of leading experts pointed out that improving black students' test performance would require continuous effort. Psychologists, socialists, and educational researchers should have devoted far more attention to the black-white test score gap (Hoff, 1998; Jencks and Phillips, 1998; Viadero, 1999, 2000). With the increased use of performance assessment in statewide testing programs and high-stakes accountability decisions (e.g., retention, promotion, summer school, and graduation), closing the achievement gap between black and white students is one of public education's most pressing concerns.

In this study, the analysis focused on examining test score gap between black and white students and patterns across grade and subject areas in a standard-based, statewide assessment program.

Design of the Study

1. Purpose of the Study

The objective of the current analysis was to better understand the achievement gap between black and white students by examining test performance on Delaware statewide assessments. The study focused on black-white test score gap in reading, mathematics, and writing across grades 3, 5, 8, and 10 by achievement level, item format, and gender within each racial/ethnic group over time.

2. Data Analysis

Students' test scores were analyzed between black and white students across grades, tests, and years by gender, item format, and achievement level. Means, standard deviations, and effect sizes (or standard mean difference) were reported.

The effect size (ES) is referred to as the standard mean difference. The measure varies about zero. When there is no difference in test scores between black and white students, effect size is zero or near zero. If white students score higher, ES is positive; if black students score higher, ES is negative. Effect size is comparable from measure to measure, even if the score scale on the tests are quite different.

3. Delaware Statewide Assessments

3a. Interim Assessment Program (IAP)

In the early stage of Educational Reform initiative, Delaware experienced a transition from standardized, all multiple-choice, shelf tests to measuring students' achievement against a set of academic expectations in student assessment program. In 1993, performance assessments (PA), such as constructed-response items in reading and mathematics and direct writing prompt were used for the first time for students in grades 3, 5, 8, and 10 in the statewide testing program. Student performance was reported as falling into one of three proficiency levels: Meets or Exceeds the Standards, Approaches the Standards, or Considerably below the Standards.

During the same period of 1993 - 1995, in addition to the performance assessment Delaware also administered a norm-referenced test (NRT) in reading and mathematics, the Survey Batteries of the Iowa Tests of Basic Skills (ITBS Form K) to students in grades 3, 5, and 8 and the Survey batteries of the Tests of Achievement and Proficiency (TAP Form K) to students in grade 10. In 1996 and 1997, the statewide testing program only contained the writing assessment for the same grade levels.

3b. Delaware Student Testing Program (DSTP)

Aligned with the rigorous Delaware Content Standards, the Delaware Student Testing Program (DSTP) targets four core content areas, English language arts (reading and writing), mathematics, science, and social studies for students in grade 3, 5, 8, and 10. The DSTP has three types of items, multiple-choice, short answer, and extended response

items. A norm-referenced test, the Stanford Achievement Series, 9th edition (SAT9) abbreviated version of the reading comprehension and the mathematical problem solving sub-tests, is embedded into the standard-based assessment. Two scores, percentile rank and standard-based score (a scale score), are reported for the DSTP results at the state, district, school, and individual levels. Percentile rank scores are based on the 30 SAT9 items of each sub-test; standard-based scores are derived from the combination of selected SAT9 items and Delaware-developed items in reading and mathematics. The SBS, ranging from 150 to 800 on a vertical scale from grade 3 to grade 10, is designed to determine student progress across grade levels over time. The DSTP writing assessment contains a text-based writing and a stand-alone prompt. The total writing raw score is reported on a 3 - 15 scale in 1998 to 2000.

Students' progress toward the standard is determined using five performance levels: Distinguished, Exceeds the Standard, Meets the Standard, below the Standard, and Well below the Standard. In this paper, meeting the standard includes students whose performance in Meets the Standard, Exceeds the Standard, and Distinguished levels

Results of the Study

1. Black-White Score Gap on Norm-Referenced Tests

Tables 1a and 1b compare the NCE scores for black and white students in reading and mathematics on ITBS and TAP during 1993-1995 and on SAT9 during 1998-2000. The effect size ranges from .67 to .88 for reading and from .71 to .88 for mathematics across grade and year. Within each year, both grades 5 and 8 have a greater effect size than grades 3 and 10; within each grade, the average effect size across year is .75 in grade 3, .82 in grades 5 and 8, and .71 in grade 10 for reading; the average effect size is .81 in grade 3, .85 in grade 5, .81 in grade 8, and .75 in grade 10 for mathematics. On the average, black students scored 15, 16, 16, and 13 points lower than white students for reading and 16, 18, 16, and 14 points lower for mathematics in grades 3, 5, 8, and 10 respectively. Within each subject area, the effect size is generally smaller on SAT9 than ITBS and TAP for corresponding grade, which may be due to the differences in content coverage and the length of the test between the two tests. Across subject area, the greater effect size for mathematics than reading suggest a wider score gap between black and white students.

2. Black-White Score Gap on Performance Assessments

Tables 2a and 2b present the scale scores for black and white students in reading, mathematics, and writing on the Interim Assessment Program during 1993-1996 and on the Delaware Student Testing Program during 1998-2000. The effect size ranges from .48 to .85 for reading and .73 to .91 for mathematics scores grades and years. The average effect size is .71, .74, .68, and .70 in reading and .81, .87, .87, and .82 for mathematics in grades 3, 5, 8, and 10, respectively, across years. Similar to the results on the norm-referenced tests, these statistics suggest that (1) over six years, the score gap

between black and white students remained similar for reading and mathematics; and (2) the test score gap in mathematics is consistently wider than reading across all grade levels. The average effect size across grades and year for each subject area indicates that the score gap is slightly wider for reading on NRT (.78 for NRT; .71 for PA) and for mathematics on performance assessment (.81 for NRT; .84 for PA). No grade patters are observed in both reading and mathematics based on the results even though slight fluctuations existed from grade to grade over time.

Table 2c shows the test score gap between black and white students for writing. The average effect size is .45, .46, .45, and .43 in grade 3, 5, 8, and 10 respectively, across years. It seems that the score gap is smaller for writing than reading and mathematics. In most cases, the difference in the average writing scores between black and white students is about a half or less than a half standard deviation. No grade patterns are observed.

3. Black-White Performance Gap (1998-2000)

Tables 3a - 3c summarize the percentage of black and white students who achieved each performance level in reading, mathematics, and writing. The average of three-year achievement gaps between black and white students who met the standard is 27%, 34%, 31%, and 31% in reading 34%, 37%, 31%, and 28% in mathematics, and 19%, 20%, 21%, and 17% in writing for grades 3, 5, 8, and 10, respectively (Tables 4a - 4c). The across year data also suggest that, after three years' test administrations, the difference in the percentage of students who met the standard between black and white students seemed to be narrowing down for reading in grade 3 (30% in 1998, 29% in 1999, and 23% in 2000) and grade 5 (34% in 1998, 35% in 1999, and 32% in 2000) and for writing in grade 5 (24% in 1998, 21% in 1999, and 16% in 2000). The gap remained similar or became slightly wider for reading in grades 8 and 10 and for mathematics in all grades.

4. Black-White Score Gap by Achievement Level (1998-2000)

The black-white gap was further examined for the low-achieving and high-achieving students in the top and the bottom 10% and 25% of the test score distributions (Tables 5a and 5b). The significant effect sizes indicate that black students scored about one to one and a half standard deviations lower than their white peers for both reading and mathematics across grades. In reading, the effect size for low-achieving students ranged from 1.13 to 1.27 in grade 3; 1.37 to 1.83 in grade 5, 1.23 to 1.86 in grade 8, and 1.30 to 1.45 in grade 10. Such score gap became bigger between high-achieving black and white students, ranging from 1.58 to 1.97 in grade 3 and 1.66 to 2.04 in grade 5, 1.49 to 2.00 in grade 8, and 1.50 to 1.84 in grade 10. Similar pattern of the score gap is found for mathematics. The effect size for low-achieving student ranges from 1.27 to 1.75 in grade3, 1.42 to 1.58 in grade 5, 1.48 to 1.83 in grade 8, and 1.09 to 1.71 in grade 10. The values of the effect size increased for high-achieving students, 1.63 to 1.86 in grade 3, 1.76 to 2.10 in grade 5, 1.73 to 2.24 in grade 8, and 1.77 to 2.42 in grade 10. The results suggest some patters across the four grades that (1) the score gap is wider among high-achieving students in the top 25% and 10% of the score distribution than low-achieving

students for both reading and mathematics; and (2) the score gap is wider in mathematics than reading for both low-achieving and high-achieving students.

5. Black-White Score Gap by Item Format (1998-2000)

Three item formats are used in the statewide assessment: multiple-choice (MC), short answer (SA), and extended constructed-response (ECR) items. All multiple-choice items include Delaware-developed items and SAT9 items. The results of examining the black-white score gap by item format suggest the following across-grade, across-content patterns (Tables 6a and 6b). First, the effect size is always larger for all multiple-choice items (more items) than for Delaware-developed items only (fewer items) for both reading and mathematics (for example, ES = .67 for Del MC and ES = .76 for all MC in grade 3 for reading; ES = .72 for Del MC and ES = .82 for all MC in grade 8 for math). Second, the effect size is found usually smaller for extended constructed-response items than multiple-choice items (ES = .64 for ECR and ES = .83 for all MC in grade 5 for reading; ES = .61 for ECR and ES = .76 for all MC in grade 10 for math). Third, for most cases, the effect size for short-answer items is found slightly larger than extended constructed-response items for reading, but smaller than multiple-choice items for reading and mathematics (For example, ES = .54 for SA, .77 for MC, .49 for ECR in grade 8 reading; ES = .72 for SA, .84 for MC, .57 for ECR in grade 3 math). The smaller effect size for short answer and extended constructed-response items than multiple-choice items across grades and subject areas seems to indicate that black students performed better in developing responses than selecting answers.

6. Black-White Test Score Gap by Gender (1998-2000)

Means, mean differences and effect sizes between black and white students are summarized by gender in Tables 7a and 7b. Within each racial group, gender differential performance shows grade patterns for each subject area. White female students consistently outperformed white male students in reading and writing on both SAT9 and performance assessment. Female's reading scores are slightly higher than male's on SAT9 (mean difference = 4, 3, 5, 2 for grades 3, 5, 8, and 10 respectively) and consistently higher than male's on performance assessment (mean difference = 10, 10, 12, 12 for grades 3, 5, 8, and 10 respectively). White male and female students performed very similar in mathematics with a slightly higher score for males over three years on SAT9 (mean difference = -1, -1, -2, -1 for grades 3, 5, 8, and 10 respectively) and performance assessment (mean difference = -1, -1, -2, -1 for grade 3, 5, 8, and 10 respectively). Black female students consistently outperformed black male students in all subject areas across grades. In reading, black female students had a higher average score than black male students over three years on SAT9 (mean difference = 4, 4, 6, 4 for grade 3, 5, 8, and 10 respectively) and performance assessment (mean difference = 14, 12, 16, and 5 for grades 3, 5, 8, and 10 respectively). In mathematics, black female students scored slightly higher than black male students on SAT9 (mean difference = 2, 3, 1, 1 for grade 3, 5, 8, and 10 respectively) and performance assessment (mean difference = 4, 5, 3, 4 for grades 3, 5, 8, and 10 respectively).

The distributions of effect sizes indicate that test score gap between black male and white male students is generally wider than the gap between black female and white female students for reading on performance assessment (ES = .73 vs. .76, .82 vs. .87, .75 vs. .79, .76 vs. .77 between female and male for grades 3, 5, 8, and 10 respectively) and for mathematics on SAT9 (ES = .74 vs. .83, .85 vs. .98, .75 vs. .81, .70 vs. .76 for grades 3, 5, 8, and 10 between female and male respectively) and performance assessment (ES = .81 vs. .90, .85 vs. .94, .81 vs. .89, .76 vs. .82 between female and male for grades 3, 5, 8, and 10 respectively) across grades. The effect sizes on SAT9 reading, however, show a mixed pattern (ES = .75 vs. .73, .76 vs. .83, .80 vs. .79, .74 vs. .76 between female and male for grades 3, 5, 8, and 10 respectively). In writing, the score gap between black male students and white male students is narrower than the gap between black female students and white female students across grades (FS = .51 vs. .47, .54 vs. .51, .56 vs. .59, .49 vs. 46 between female and males in grades 3, 5, 8, and 10 respectively).

Tables 8a, 8b, and 8c present the performance gap between black and white students by gender in terms of the percentage of students who met the standards in reading, mathematics, and writing. Within the racial group, white female students had a higher percentage of meeting the standard in reading (81% vs. 72%, 77% vs. 67%, 77% vs. 66%, 71% vs. 59% for females vs. males in grades 3, 5, 8, and 10 respectively) and writing (for females vs. males 59% vs.45%, 58% vs. 40%, 67% vs. 47%, 53% vs. 35% for grades 3, 5, 8, and 10 respectively) across grades. In mathematics, both genders had a very similar percentage of meeting the standard in grades 3 (74% vs. 74%) and 5 (67% vs. 66%), but white male students had a higher percentage than white females in grades 8 (44% vs. 48%) and 10 (38% vs. 40%). Black females students had a higher percentage of meeting the standard in reading (55% vs. 43%, 45% vs. 33%, 48% vs. 34%, 39% vs. 29% between female and male in grades 3, 5, 8, and 10 respectively) and writing (40% vs. 26%, 35% vs. 21%, 44% 27%, 34% vs. 19% between female and male in grades 3, 5, 8, and 10 respectively). In mathematics, more black female students than black male students met the standard in grades 3 (41% vs. 38%) and 5 (32% vs. 28%), but both genders had a very similar percentage of students who met the standard in grades 8 (15% s. 15%) and 10 (12% vs. 11%).

Across subject areas, the performance gap between black and white students is about 25% to 32% for females and 30% to 35% for males in reading, 26% to 35% for females and 30% to 39% for males in mathematics, and 19% to 23% for females and 15% to 20% for males in writing.

Findings of the Study

Similar to the previous findings, the current study found that (1) the test scores of black students lag behind white students for reading, mathematics, and writing in grades 3, 5, 8, and 10 based on Delaware longitudinal data; (2) the black-white achievement gap remained similar over six years for reading, mathematics, and writing on both norm-referenced tests and performance assessments.

The results of this study also suggest the following preliminary findings:

(1) The differential performance showed the largest gap between black and white students in mathematics and the smallest gap in writing across grades.

(2)

(2) The black-white achievement gap became much wider for the low-achieving and high-achieving students in the bottom and the top 10% and 25% of the score distributions.

(3) Analysis of black-white achievement gap by item format seems to suggest that black students performed better in developing their responses than selecting answers from the choices provided.

(4) Within the racial group, black female students consistently scored higher than black male students on all tests across grades. The achievement gap is smaller between black and white female students for reading and mathematics than between black and white male students; but larger for writing.

Additional evidence is needed to support the findings based on the current analysis, such as content coverage of each test, reliability of test scores, and standard error of measurement.

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Table 1a

Comparison of Reading NCE Scores between Black and White Students

1993 Grade	Black *Mean*	White *Mean*	Mean Diff	Effect Size
3	35.7	51.0	15.3	0.78
5	37.2	53.2	16.0	0.88
8	38.3	54.2	15.9	0.85
10	42.8	56.2	13.4	0.67
1994				
3	34.3	49.0	14.7	0.74
5	36.4	51.6	15.2	0.82
8	38.0	53.8	15.7	0.84
10	42.5	55.7	13.2	0.66
1995				
3	33.7	49.1	15.4	0.79
5	35.8	52.0	16.2	0.85
8	37.1	53.4	16.3	0.87
10	41.1	55.0	13.9	0.68
1998				
3	41.2	55.3	14.1	0.72
5	39.1	55.1	16.0	0.78
8	41.2	57.1	15.9	0.79
10	35.4	48.3	12.9	0.73
1999				
3	43.8	58.3	14.5	0.77
5	40.1	55.5	15.4	0.80
8	41.8	56.9	15.1	0.77
10	34.7	47.1	12.4	0.70
2000				
3	46.7	59.8	13.1	0.71
5	41.2	56.4	15.2	0.78
8	43.2	58.9	15.7	0.78
10	36.6	50.1	13.5	0.79

Table 1b

Comparison of Math NCE Scores between Black and White Students

1993 Grade	Black *Mean*	White *Mean*	Mean Diff	Effect Size
3	32.2	48.9	16.8	0.84
5	35.5	52.4	16.9	0.88
8	38.9	54.2	15.2	0.84
10	39.9	54.3	14.4	0.77
1994				
3	33.1	49.6	16.4	0.82
5	34.6	51.4	16.8	0.85
8	37.8	53.2	15.4	0.83
10	38.9	54.3	15.4	0.81
1995				
3	33.4	50.5	17.1	0.86
5	33.9	50.7	16.9	0.87
8	36.7	53.2	16.5	0.88
10	39.6	53.9	14.4	0.75
1998				
3	40.3	55.6	15.3	0.76
5	38.2	57.0	18.8	0.83
8	38.6	53.5	14.9	0.77
10	37.1	50.6	13.5	0.71
1999				
3	43.2	59.7	16.5	0.82
5	39.1	58.1	19.0	0.85
8	38.3	53.0	14.7	0.77
10	35.5	49.3	13.8	0.73
2000				
3	48.3	63.4	15.1	0.77
5	41.5	59.7	18.2	0.84
8	40.5	56.0	15.5	0.79
10	37.8	52.6	14.8	0.75

Table 2a

Comparison of Reading Scale Scores between Black and White Students

1993 Grade	Black *Mean*	White *Mean*	Mean Diff	Effect Size
3	501.4	539.9	38.5	0.59
5	527.1	553.1	26.0	0.53
8	504.5	541.4	36.9	0.59
10	501.9	555.2	53.3	0.73
1994				
3	487.8	532.8	45.1	0.66
5	516.3	551.5	35.3	0.67
8	501.6	539.3	37.7	0.57
10	497.8	554.3	56.5	0.74
1995				
3	486.0	540.3	54.4	0.79
5	512.1	556.3	44.2	0.75
8	496.3	539.4	43.1	0.66
10	501.6	541.7	40.1	0.48
1998				
3	388.3	429.7	41.4	0.74
5	434.3	471.0	36.7	0.85
8	486.7	516.1	29.4	0.76
10	485.9	515.6	29.7	0.75
1999				
3	406.5	436.7	30.2	0.76
5	436.7	471.7	35.0	0.85
8	487.0	515.5	28.5	0.71
10	480.0	510.4	30.4	0.73
2000				
3	415.7	443.5	27.8	0.71
5	443.2	476.4	33.2	0.81
8	488.8	519.0	30.2	0.78
10	486.8	518.1	31.3	0.76

Table 2b

Comparison of Math Scale Scores between Black and White Students

1993 Grade	Black *Mean*	White *Mean*	Mean Diff	Effect Size
3	484.9	536.8	51.9	0.73
5	469.2	523.2	54.0	0.83
8	459.4	524.3	64.9	0.90
10	480.3	538.7	58.4	0.88
1994				
3	481.3	538.6	57.2	0.78
5	464.0	518.3	54.4	0.81
8	444.5	517.4	72.9	0.89
10	472.3	533.6	61.3	0.78
1995				
3	482.0	539.7	57.8	0.76
5	454.7	516.9	62.2	0.91
8	447.6	518.5	70.9	0.90
10	470.3	533.1	62.8	0.85
1998				
3	388.2	419.5	31.3	0.83
5	425.1	460.0	34.9	0.90
8	456.0	490.6	34.6	0.84
10	489.5	516.7	27.2	0.76
1999				
3	395.8	431.2	35.4	0.90
5	428.7	462.6	33.9	0.90
8	457.9	489.7	31.8	0.84
10	487.6	515.6	28.0	0.80
2000				
3	406.8	439.3	32.5	0.85
5	433.3	467.0	33.7	0.89
8	461.7	494.9	33.2	0.87
10	491.6	521.2	29.6	0.82

Table 2c

Comparison of Writing Scores between Black and White Students

1993 Grade	Black *Mean*	White *Mean*	Mean *Diff*	Effect Size
3	429.8	457.5	27.7	0.38
5	435.4	459.0	23.6	0.41
8	470.6	495.9	25.3	0.37
10	491.7	511.8	20.1	0.40
3	427.6	458.6	31.1	0.41
5	449.0	476.3	27.3	0.40
8	487.8	515.2	27.4	0.39
10	488.9	517.4	28.5	0.43
3	434.2	466.0	31.8	0.46
5	451.0	477.8	26.8	0.43
8	479.6	511.0	31.4	0.42
10	496.6	527.1	30.5	0.41
1998				
3	6.2	7.1	0.9	0.46
5	6.6	7.7	1.1	0.57
8	7.0	8.0	1.0	0.48
10	6.3	7.1	0.8	0.48
1999				
3	5.6	6.7	1.1	0.59
5	6.8	7.7	0.9	0.50
8	6.8	7.6	0.8	0.46
10	6.2	7.0	0.8	0.42
2000				
3	5.5	6.2	0.7	0.39
5	6.1	6.9	0.8	0.43
8	6.7	7.5	0.8	0.55
10	6.7	7.5	0.8	0.44

Table 3a

Comparisons of Reading Performance Levels between Black and White Students

		1998		1999		2000		Average	
	Performance	Black	White	Black	White	Black	White	Black	White
Grade	Level	%	%	%	%	%	%	%	%
3	Well Below	39.0	15.7	29.8	11.0	21.6	8.4	30.2	11.7
	Below	20.5	14.2	22.5	12.1	20.2	9.8	21.1	12.0
	Meets	35.8	49.3	39.8	50.3	48.9	51.7	41.5	50.4
	Exceeds	3.2	11.8	5.1	14.7	5.9	14.0	4.7	13.5
	Distinguish	1.5	9.0	2.7	11.9	3.4	16.1	2.5	12.4
5	Well Below	44.5	16.2	39.5	14.2	32.3	11.4	38.8	13.9
	Below	20.4	14.2	22.9	13.7	24.0	12.7	22.4	13.5
	Meets	30.4	48.7	33.6	53.9	38.6	53.0	34.2	51.9
	Exceeds	3.5	12.7	2.7	10.4	3.5	14.2	3.2	12.4
	Distinguish	1.2	8.2	1.3	7.9	1.7	8.6	1.4	8.2
8	Well Below	37.5	14.7	36.9	15.1	34.2	12.2	36.2	14.0
	Below	24.3	15.4	22.4	15.6	22.7	13.4	23.1	14.8
	Meets	36.0	61.6	38.6	59.1	41.1	63.2	38.6	61.3
	Exceeds	1.8	6.2	1.6	6.6	1.8	8.7	1.7	7.1
	Distinguish	0.3	2.2	0.4	3.6	0.2	2.5	0.3	2.7
10	Well Below	37.6	16.0	44.6	20.0	38.6	15.0	40.3	17.0
	Below	27.3	17.8	25.3	18.7	24.7	17.1	25.8	17.8
	Meets	34.2	60.1	29.0	55.5	35.5	60.9	32.9	58.8
	Exceeds	0.6	4.5	0.8	3.9	1.0	3.9	0.8	4.1
	Distinguish	0.4	1.7	0.4	1.8	0.2	3.1	0.3	2.2

Table 3b
Comparisons of Math Performance Levels between Black and White Students

Grade	Performance Level	1998 Black %	1998 White %	1999 Black %	1999 White %	2000 Black %	2000 White %	Average Black %	Average White %
3	Well Below	45.3	17.6	36.1	10.6	24.7	7.1	35.4	11.8
	Below	24.8	17.6	26.6	15.1	25.7	12.6	25.7	15.1
	Meets	28.0	53.1	33.6	55.1	43.6	53.5	35.0	53.9
	Exceeds	1.8	9.2	3.2	14.3	5.1	19.7	3.3	14.4
	Distinguish	0.2	2.5	0.6	4.9	1.0	7.1	0.6	4.9
5	Well Below	48.9	17.3	43.9	14.5	39.5	12.6	44.1	14.8
	Below	23.9	19.4	27.1	20.1	27.7	17.0	26.2	18.8
	Meets	25.2	49.6	27.0	50.6	30.1	53.7	27.4	51.3
	Exceeds	1.5	8.9	1.6	9.6	1.7	9.5	1.6	9.3
	Distinguish	0.5	4.7	0.5	5.2	1.0	7.3	0.6	5.8
8	Well Below	68.7	33.9	65.7	31.0	59.5	25.0	64.6	30.0
	Below	17.1	21.0	20.7	25.1	23.9	25.3	20.5	23.8
	Meets	11.6	27.3	11.8	28.4	13.8	32.2	12.4	29.3
	Exceeds	1.6	8.0	1.2	6.9	1.8	8.1	1.6	7.7
	Distinguish	0.9	9.7	0.6	8.6	1.1	9.4	0.9	9.2
10	Well Below	70.9	37.3	66.3	34.5	66.1	31.1	67.8	34.3
	Below	18.0	25.1	23.4	28.2	21.4	26.4	20.9	26.6
	Meets	8.6	23.1	8.7	24.7	10.2	26.0	9.2	24.6
	Exceeds	1.4	5.7	0.9	4.3	1.3	6.2	1.2	5.4
	Distinguish	1.1	8.8	0.7	8.2	1.0	10.3	0.9	9.1

Table 3c

Comparisons of Writing Performance Levels between Black and White Students

		1998		1999		2000		Average	
Grade	Performance Level	Black %	White %	Black %	White %	Black %	White %	Black %	White %
3	Well Below	19.7	10.4	30.5	13.6	24.1	14.2	24.7	12.7
	Below	38.9	29.5	38.3	31.2	50.4	46.0	42.5	35.6
	Meets	40.3	56.4	30.8	52.8	25.4	39.1	32.2	49.4
	Exceeds	1.1	3.3	0.4	2.2	0.2	0.7	0.6	2.1
	Distinguish	0.0	0.3	0.0	0.2	0.0	0.1	0.0	0.2
5	Well Below	27.9	12.5	25.9	12.0	39.2	23.9	31.0	16.1
	Below	43.4	34.9	39.7	32.3	38.9	38.1	40.7	35.1
	Meets	26.6	44.9	32.2	49.4	21.2	36.1	26.7	43.5
	Exceeds	2.0	7.1	2.1	6.0	0.7	1.7	1.6	5.0
	Distinguish	0.2	0.6	0.1	0.2	0.0	0.1	0.1	0.3
8	Well Below	23.3	11.9	24.7	13.1	22.9	10.5	23.6	11.8
	Below	36.7	27.9	40.4	32.9	44.1	33.8	40.4	31.5
	Meets	36.0	49.0	33.9	49.7	32.6	53.7	34.2	50.8
	Exceeds	3.9	10.6	1.0	4.1	0.4	1.8	1.8	5.5
	Distinguish	0.1	0.7	0.1	0.2	0.0	0.1	0.1	0.3
10	Well Below	35.1	18.7	37.5	23.3	27.7	15.4	33.4	19.2
	Below	42.6	40.5	37.8	36.7	38.4	33.7	39.6	36.9
	Meets	21.4	38.7	23.5	36.4	32.9	46.0	25.9	40.4
	Exceeds	0.9	2.1	1.2	3.4	1.0	4.7	1.0	3.4
	Distinguish	0.0	0.0	0.1	0.2	0.0	0.2	0.0	0.1

Table 4a
Comparisons of Reading Performance Levels between Black and White Students

Grade	Performance Level	1998 Black %	1998 White %	1998 Diff %	1999 Black %	1999 White %	1999 Diff %	2000 Black %	2000 White %	2000 Diff %
3										
	Meets	40.5	70.1	**29.6**	47.6	77.0	**29.4**	58.1	81.1	**23.0**
	Below	20.5	14.2		22.5	12.1		20.2	9.8	
	Well Below	39.0	15.7		29.8	11.0		21.6	8.4	
5										
	Meets	35.2	69.6	**34.4**	37.6	72.1	**34.5**	43.7	75.9	**32.2**
	Below	20.4	14.2		22.9	13.7		24.0	12.7	
	Well Below	44.5	16.2		39.5	14.2		32.3	11.4	
8										
	Meets	38.1	69.6	**31.5**	40.6	69.2	**28.6**	43.1	74.4	**31.3**
	Below	24.3	15.4		22.4	15.6		22.7	13.4	
	Well Below	37.5	14.7		36.9	15.1		34.2	12.2	
10										
	Meets	35.2	66.2	**31.0**	30.1	61.3	**31.2**	36.7	67.9	**31.2**
	Below	27.3	17.8		25.3	18.7		24.7	17.1	
	Well Below	37.6	16.0		44.6	20.0		38.6	15.0	

Table 4b
Comparisons of Math Performance Levels between Black and White Students

		1998			1999			2000		
Grade	Performance Level	Black %	White %	Diff %	Black %	White %	Diff %	Black %	White %	Diff %
3	Meets	29.9	64.8	**34.9**	37.3	74.3	**37.0**	49.6	80.4	**30.8**
	Below	24.8	17.6		26.6	15.1		25.7	12.6	
	Well Below	45.3	17.6		36.1	10.6		24.7	7.1	
5	Meets	27.2	63.3	**36.1**	29.1	65.4	**36.3**	32.8	70.4	**37.6**
	Below	23.9	19.4		27.1	20.1		27.7	17.0	
	Well Below	48.9	17.3		43.9	14.5		39.5	12.6	
8	Meets	14.2	45.1	**30.9**	13.7	43.9	**30.2**	16.6	49.6	**33.0**
	Below	17.1	21.0		20.7	25.1		23.9	25.3	
	Well Below	68.7	33.9		65.7	31.0		59.5	25.0	
10	Meets	11.1	37.5	**26.4**	10.3	37.2	**26.9**	12.5	42.5	**30.0**
	Below	18.0	25.1		23.4	28.2		21.4	26.4	
	Well Below	70.9	37.3		66.3	34.5		66.1	31.1	

Table 4c
Comparisons of Writing Performance Levels between Black and White Students

Grade	Performance Level	1998 Black %	1998 White %	1998 Diff %	1999 Black %	1999 White %	1999 Diff %	2000 Black %	2000 White %	2000 Diff %
3	**Meets**	41.1	60.0	**18.9**	31.2	55.2	**24.0**	25.5	39.8	**14.3**
	Below	38.9	29.5		38.3	31.2		50.4	46.0	
	Well Below	19.7	10.4		30.5	13.6		24.1	14.2	
5	**Meets**	28.7	52.6	**23.9**	34.4	55.7	**21.3**	21.9	38.0	**16.1**
	Below	43.4	34.9		39.7	32.3		38.9	38.1	
	Well Below	27.9	12.5		25.9	12.0		39.2	23.9	
8	**Meets**	40.0	60.2	**20.2**	35.0	54.0	**19.0**	33.0	55.7	**22.7**
	Below	36.7	27.9		40.4	32.9		44.1	33.8	
	Well Below	23.3	11.9		24.7	13.1		22.9	10.5	
10	**Meets**	22.3	40.8	**18.5**	24.8	40.0	**15.2**	33.9	50.9	**17.0**
	Below	42.6	40.5		37.8	36.7		38.4	33.7	
	Well Below	35.1	18.7		37.5	23.3		27.7	15.4	

Table 5a

Comparison of Reading Scores between Black and White Students by Achievement Level

	1998				1999				2000			
Grade 3	Black Mean	White Mean	Mean Diff	Effect Size	Black Mean	White Mean	Mean Diff	Effect Size	Black Mean	White Mean	Mean Diff	Effect Size
Low 10%	322.9	344.1	21.2	1.16	336.2	356.9	20.7	1.13	340.4	365.5	25.2	1.27
Low 25%	343.8	369.8	26.0	1.11	355.3	382.7	27.4	1.21	361.8	389.2	27.4	1.14
High 25%	447.8	477.7	29.9	1.79	455.1	481.8	26.7	1.64	463.0	487.8	24.8	1.59
High 10%	465.6	492.4	26.8	1.85	473.5	494.9	21.4	1.58	476.8	503.2	26.4	1.97
Grade 5												
Low 10%	357.2	387.6	30.4	1.83	368.0	392.3	24.3	1.51	368.5	396.6	28.1	1.61
Low 25%	380.7	411.3	30.6	1.38	385.1	416.3	31.1	1.48	389.6	420.4	30.8	1.37
High 25%	486.9	522.5	35.6	1.79	488.4	520.1	31.6	1.66	492.3	524.9	32.6	1.78
High 10%	506.1	541.4	35.3	2.04	505.3	535.1	29.7	1.72	511.8	541.4	29.7	1.89
Grade 8												
Low 10%	413.7	441.3	27.6	1.59	412.5	436.9	24.3	1.41	410.5	443.5	33.0	1.86
Low 25%	434.6	464.7	30.1	1.37	433.0	460.4	27.4	1.23	434.1	467.5	33.4	1.46
High 25%	534.8	559.3	24.5	1.49	535.6	563.1	27.5	1.60	537.3	561.7	24.4	1.53
High 10%	550.1	574.9	24.7	1.74	551.4	580.4	29.0	2.00	551.7	576.6	24.9	1.81
Grade 10												
Low 10%	412.6	438.9	26.3	1.45	409.0	429.7	20.8	1.30	411.5	438.6	27.1	1.31
Low 25%	431.8	462.1	30.3	1.35	425.3	452.4	27.0	1.30	432.3	462.3	30.0	1.25
High 25%	535.5	562.6	27.1	1.62	530.8	559.5	28.8	1.54	535.8	564.8	29.0	1.50
High 10%	550.4	576.2	25.7	1.77	548.9	577.2	28.3	1.76	552.9	584.2	31.3	1.84

Table 5b

Comparison of Math Scores between Black and White Students by Achievement Level

	1998				1999				2000			
Grade 3	Black Mean	White Mean	Mean Diff	Effect Size	Black Mean	White Mean	Mean Diff	Effect Size	Black Mean	White Mean	Mean Diff	Effect Size
Low 10%	330.3	349.5	19.2	1.27	331.2	358.5	27.3	1.71	342.1	369.9	27.8	1.75
Low 25%	344.7	368.8	24.1	1.35	347.9	378.8	30.9	1.60	361.6	388.0	26.5	1.41
High 25%	433.6	466.8	33.2	1.68	444.1	480.6	36.5	1.71	452.2	487.5	35.4	1.63
High 10%	451.1	484.3	33.2	1.86	463.7	500.2	36.5	1.82	471.8	506.9	35.1	1.72
Grade 5												
Low 10%	358.7	385.7	27.0	1.58	367.2	391.3	24.1	1.62	375.3	395.7	20.4	1.42
Low 25%	377.3	407.7	30.4	1.50	382.3	411.5	29.2	1.55	389.6	416.3	26.6	1.48
High 25%	470.5	507.5	37.0	1.95	472.9	509.0	36.1	1.85	477.1	515.6	38.6	1.76
High 10%	489.7	523.5	33.8	2.00	490.4	527.5	37.1	2.10	496.7	535.7	39.0	1.93
Grade 8												
Low 10%	405.8	422.7	16.9	1.53	405.7	425.4	19.7	1.52	406.7	428.8	22.1	1.83
Low 25%	418.6	439.3	20.7	1.48	418.9	441.3	22.4	1.50	421.4	446.7	25.3	1.67
High 25%	500.3	547.3	47.0	1.77	497.3	543.6	46.3	1.82	504.6	547.1	42.6	1.73
High 10%	522.0	572.2	50.2	2.01	516.4	568.8	52.4	2.24	523.8	569.4	45.6	1.88
Grade 10												
Low 10%	444.1	457.4	13.3	1.34	437.3	457.6	20.3	1.71	444.9	461.3	16.4	1.09
Low 25%	456.3	471.8	15.5	1.28	452.7	470.5	17.8	1.35	455.6	474.5	18.9	1.24
High 25%	527.4	568.6	41.2	1.77	523.6	564.0	40.4	1.74	529.6	573.2	43.6	1.83
High 10%	546.4	591.8	45.4	2.24	542.0	589.5	47.5	2.42	548.4	597.2	48.8	2.31

Table 6a
Comparisons of Reading Scores between Black and White Students by Item Format

Item Format	Max. Points	1998 Black Mean	1998 White Mean	1998 Mean Diff	1998 Effect Size	1999 Black Mean	1999 White Mean	1999 Mean Diff	1999 Effect Size	2000 Black Mean	2000 White Mean	2000 Mean Diff	2000 Effect Size
Grade 3													
Del. MC	25	13.9	17.5	3.7	0.69	14.3	17.8	3.5	0.69	53.1	55.9	2.8	0.62
All MC	55	30.2	38.2	8.0	0.76	31.5	39.5	7.9	0.80	71.1	77.9	6.7	0.71
Short Answer	16	7.8	9.9	2.0	0.54	7.5	9.3	1.8	0.53	8.5	9.9	1.5	0.48
Ext. CR	16	5.2	6.6	1.5	0.55	5.8	7.5	1.7	0.53	3.8	5.1	1.2	0.48
Grade 5													
Del. MC	25	13.8	17.7	3.9	0.73	13.5	17.7	4.2	0.77	50.0	53.6	3.6	0.74
All MC	55	28.8	37.6	8.7	0.83	29.0	37.8	8.9	0.86	65.5	73.8	8.3	0.81
Short Answer	16	7.0	9.9	2.9	0.72	7.6	10.4	2.7	0.68	8.0	10.4	2.4	0.65
Ext. CR	16	5.2	7.6	2.4	0.73	5.6	7.7	2.0	0.66	5.6	7.2	1.5	0.54
Grade 8													
Del. MC	25	14.3	17.7	3.4	0.66	13.7	17.1	3.5	0.61	50.6	54.5	3.9	0.69
All MC	55	32.2	39.8	7.6	0.80	32.7	40.5	7.8	0.75	68.1	76.5	8.4	0.75
Short Answer	16	6.2	8.2	2.0	0.60	5.7	7.4	1.6	0.45	6.9	8.8	2.0	0.58
Ext. CR	16	4.9	6.6	1.6	0.49	5.1	6.7	1.6	0.49	5.0	6.6	1.6	0.48
Grade 10													
Del. MC	25	14.3	17.6	3.3	0.61	12.7	16.6	3.9	0.60	50.0	53.1	3.2	0.62
All MC	55	31.1	38.1	7.0	0.74	29.8	37.2	7.4	0.73	65.5	73.3	7.8	0.75
Short Answer	16	3.2	5.2	2.0	0.62	3.0	5.1	2.2	0.63	5.3	7.7	2.4	0.70
Ext. CR	16	4.9	6.7	1.8	0.55	4.6	6.6	2.0	0.55	5.9	7.6	1.7	0.54

Table 6b
Comparisons of Math Scores between Black and White Students by Item Format

Item Format	Max. Points	1998 Black Mean	1998 White Mean	1998 Mean Diff	1998 Effect Size	1999 Black Mean	1999 White Mean	1999 Mean Diff	1999 Effect Size	2000 Black Mean	2000 White Mean	2000 Mean Diff	2000 Effect Size
Grade 3													
Del. MC	20	10.7	13.4	2.7	0.76	11.4	14.4	2.9	0.83	11.4	14.3	3.0	0.81
All MC	50	26.6	33.6	6.9	0.81	28.3	35.6	7.4	0.88	29.7	36.5	6.8	0.84
Short Answer	16	5.9	8.6	2.7	0.69	7.5	10.5	3.0	0.75	7.4	9.9	2.6	0.71
Ext. CR	12	5.9	7.6	1.6	0.64	5.0	7.1	2.1	0.76	6.0	7.7	1.8	0.30
Grade 5													
Del. MC	20	10.3	13.8	3.5	0.86	11.4	14.4	2.9	0.83	8.5	11.6	3.2	0.81
All MC	50	26.1	34.5	8.4	0.90	28.3	35.6	7.4	0.88	25.2	33.1	7.9	0.89
Short Answer	16	4.6	7.2	2.5	0.75	7.5	10.5	3.0	0.75	4.3	6.9	2.6	0.72
Ext. CR	12	2.9	4.5	1.6	0.66	5.0	7.1	2.1	0.76	2.7	4.9	2.2	0.74
Grade 8													
Del. MC	20	8.3	11.2	2.9	0.72	8.4	11.1	2.7	0.70	8.9	11.9	3.0	0.75
All MC	50	20.2	27.6	7.4	0.81	20.2	27.4	7.2	0.81	21.4	29.1	7.7	0.85
Short Answer	16	2.6	5.3	2.7	0.71	3.4	5.8	2.4	0.65	3.4	5.8	2.4	0.69
Ext. CR	12	1.4	3.4	2.0	0.75	2.0	4.3	2.2	0.78	2.6	5.3	2.7	0.80
Grade 10													
Del. MC	20	7.0	9.4	2.4	0.65	7.2	9.4	2.2	0.63	7.3	9.6	2.3	0.66
All MC	50	17.3	23.6	6.3	0.74	17.1	23.3	6.3	0.76	17.9	24.5	6.6	0.78
Short Answer	16	1.3	3.1	1.8	0.60	2.7	4.9	2.2	0.65	2.9	5.7	2.8	0.75
Ext. CR	12	0.6	1.8	1.2	0.54	1.8	3.4	1.6	0.66	5.5	6.6	1.1	0.64

Table 7a
Comparisons of Test Scores between Black and White Students by Gender

			1998			1999			2000		
Grade	Gender	Score	Black Mean	White Mean	Effect Size	Black Mean	White Mean	Effect Size	Black Mean	White Mean	Effect Size
3	Female	SAT9 Reading NCE	43.8	57.8	0.73	45.6	60.2	0.80	49.1	61.8	0.71
		SAT9 Math NCE	41.8	55.5	0.69	43.6	59.2	0.80	49.2	63.4	0.74
		Reading Scale	407.1	436.4	0.71	411.8	442.2	0.80	422.6	448.2	0.68
		Math Scale	391.3	419.6	0.76	397.1	430.2	0.85	408.2	439.7	0.83
		Writing Raw Score	6.6	7.5	0.47	5.9	7.1	0.63	5.8	6.5	0.44
	Male	SAT9 Reading NCE	38.9	53.0	0.71	42.0	56.5	0.75	44.5	58.0	0.73
		SAT9 Math NCE	38.8	55.7	0.83	42.8	60.2	0.85	47.4	63.5	0.81
		Reading Scale	390.4	423.6	0.78	401.6	431.8	0.75	409.3	439.3	0.76
		Math Scale	385.5	419.4	0.89	394.5	432.0	0.95	405.4	439.0	0.87
		Writing Raw Score	5.7	6.6	0.46	5.3	6.4	0.59	5.3	5.9	0.37
5	Female	SAT9 Reading NCE	40.9	56.7	0.78	42.8	57.1	0.75	43.3	57.9	0.74
		SAT9 Math NCE	39.6	56.6	0.78	40.0	57.7	0.82	43.1	59.6	0.77
		Reading Scale	440.1	476.8	0.86	443.9	476.7	0.80	449.4	481.6	0.79
		Math Scale	427.6	460.0	0.86	430.9	462.9	0.86	436.0	466.9	0.83
		Writing Raw Score	7.0	8.1	0.59	7.2	8.1	0.54	6.4	7.3	0.49
	Male	SAT9 Reading NCE	37.3	53.7	0.81	37.6	53.9	0.86	39.2	54.9	0.81
		SAT9 Math NCE	36.8	57.6	0.89	38.3	58.4	0.89	40.1	60.0	0.90
		Reading Scale	428.5	465.4	0.86	430.2	467.4	0.92	437.5	471.6	0.84
		Math Scale	422.5	460.0	0.94	426.7	462.4	0.94	430.9	467.0	0.93
		Writing Raw Score	6.2	7.3	0.61	6.4	7.3	0.52	5.8	6.4	0.40

Table 7b

Comparisons of Test Scores between Black and White Students by Gender

			1998			1999			2000		
			Black	White	Effect	Black	White	Effect	Black	White	Effect
Grade	Gender	Score	*Mean*	*Mean*	Size	*Mean*	*Mean*	Size	*Mean*	*Mean*	Size
8	Female	SAT9 Reading NCE	44.6	60.4	0.82	44.6	59.8	0.80	45.3	60.7	0.78
		SAT9 Math NCE	38.6	53.4	0.79	38.7	52.2	0.73	40.5	54.5	0.74
		Reading Scale	495.5	524.2	0.79	495.4	522.2	0.71	495.5	523.7	0.75
		Math Scale	457.6	490.2	0.83	460.1	489.0	0.80	463.2	492.5	0.81
		Writing Raw Score	7.5	8.5	0.54	7.2	8.0	0.51	7.0	7.8	0.62
	Male	SAT9 Reading NCE	37.9	54.2	0.81	38.9	54.1	0.76	41.1	57.2	0.79
		SAT9 Math NCE	38.4	53.6	0.76	37.8	53.8	0.82	40.5	57.4	0.84
		Reading Scale	478.2	508.8	0.78	478.7	509.3	0.74	482.2	514.8	0.84
		Math Scale	455.7	490.9	0.85	455.6	490.4	0.88	460.3	497.0	0.93
		Writing Raw Score	6.5	7.5	0.47	6.3	7.1	0.48	6.4	7.2	0.54
10	Female	SAT9 Reading NCE	37.6	49.9	0.73	36.6	48.5	0.71	38.0	51.1	0.77
		SAT9 Math NCE	37.8	50.6	0.70	35.7	48.3	0.71	38.3	51.3	0.68
		Reading Scale	493.6	522.2	0.76	486.8	516.7	0.75	494.6	524.6	0.76
		Math Scale	491.2	517.2	0.76	489.8	514.8	0.77	494.1	519.9	0.75
		Writing Raw Score	6.7	7.5	0.54	6.5	7.4	0.45	7.0	7.8	0.47
	Male	SAT9 Reading NCE	33.3	46.8	0.75	32.7	45.9	0.72	35.1	49.2	0.82
		SAT9 Math NCE	36.5	50.6	0.70	35.4	50.3	0.75	37.3	53.9	0.82
		Reading Scale	478.2	509.2	0.76	472.9	504.5	0.75	478.8	512.1	0.80
		Math Scale	487.8	516.2	0.75	485.5	516.3	0.82	489.0	522.5	0.88
		Writing Raw Score	5.9	6.6	0.48	5.8	6.6	0.44	6.3	7.1	0.46

Table 8a
Comparisons of Performance Levels between Black and White Students by Gender

			1998		1999		2000	
Grade	Gender	Performance Level	Black %	White %	Black %	White %	Black %	White %
3	Female	Well Below	29.75	11.98	24.86	7.61	16.65	6.45
		Below	21.40	12.77	21.93	11.07	18.96	8.36
		Meets	42.48	49.98	43.86	50.81	52.12	50.52
		Exceeds	4.30	13.53	5.71	15.66	7.96	15.06
		Distinguish	2.07	11.74	3.63	14.86	4.31	19.60
	Male	Well Below	47.33	19.19	34.69	13.93	26.26	10.15
		Below	19.76	15.52	23.10	12.97	21.41	11.00
		Meets	29.79	48.67	35.89	49.95	45.81	52.65
		Exceeds	2.15	10.15	4.51	13.86	4.02	13.10
		Distinguish	0.97	6.48	1.81	9.30	2.49	13.10
5	Female	Well Below	39.05	12.73	32.54	11.87	27.21	9.54
		Below	21.05	12.61	23.41	12.30	22.51	10.75
		Meets	33.87	50.04	38.41	53.54	43.72	52.30
		Exceeds	4.12	14.38	3.89	12.38	4.62	16.37
		Distinguish	1.91	10.24	1.75	9.91	1.94	11.03
	Male	Well Below	50.00	19.51	45.87	16.20	36.91	13.20
		Below	19.64	15.77	22.50	14.96	25.38	14.51
		Meets	26.86	47.33	29.22	54.16	33.92	53.73
		Exceeds	2.95	11.09	1.53	8.62	2.41	12.26
		Distinguish	0.54	6.30	0.88	6.06	1.39	6.30

Table 8a
Comparisons of Performance Levels between Black and White Students by Gender

			1998		1999		2000	
Grade	Gender	Performance Level	Black %	White %	Black %	White %	Black %	White %
8	Female	Well Below	29.24	9.23	27.73	10.59	27.58	9.37
		Below	23.26	13.09	24.90	14.12	23.93	12.65
		Meets	44.39	66.25	44.22	62.04	45.55	64.13
		Exceeds	2.62	8.19	2.51	8.21	2.56	10.46
		Distinguish	0.49	3.24	0.65	5.05	0.39	3.39
	Male	Well Below	45.49	19.63	46.10	19.33	40.79	14.77
		Below	25.33	17.42	19.95	17.03	21.47	14.19
		Meets	28.00	57.39	33.07	56.37	36.67	62.37
		Exceeds	1.10	4.39	0.64	5.05	0.99	7.01
		Distinguish	0.08	1.17	0.24	2.23	0.08	1.66
10	Female	Well Below	29.78	11.84	38.43	15.92	31.45	11.37
		Below	30.28	15.96	25.99	16.69	25.91	14.68
		Meets	38.52	63.72	34.10	60.02	40.82	64.68
		Exceeds	1.12	6.08	1.01	5.12	1.45	5.16
		Distinguish	0.30	2.40	0.46	2.26	0.36	4.11
	Male	Well Below	45.24	20.09	50.96	23.90	46.06	18.35
		Below	24.27	19.50	24.66	20.50	23.45	19.45
		Meets	29.99	56.51	23.61	51.32	30.02	57.29
		Exceeds	0.10	2.97	0.48	2.84	0.47	2.74
		Distinguish	0.40	0.94	0.29	1.44	0.00	2.17

Table 8b
Comparisons of Performance Levels between Black and White Students by Gender

			1998		1999		2000	
Grade	Gender	Performance Level	Black %	White %	Black %	White %	Black %	White %
3	Female	Well Below	42.22	17.92	34.39	10.49	23.32	6.49
		Below	25.17	18.24	27.74	15.60	25.83	12.90
		Meets	30.71	52.43	33.85	56.17	44.56	53.60
		Exceeds	1.74	9.02	3.32	13.03	5.18	19.77
		Distinguish	0.17	2.39	0.70	4.70	1.11	7.24
	Male	Well Below	48.07	17.33	37.80	10.71	25.97	7.58
		Below	24.44	16.96	25.45	14.62	25.56	12.26
		Meets	25.48	53.64	33.28	54.22	42.64	53.40
		Exceeds	1.78	9.42	3.01	15.44	4.93	19.69
		Distinguish	0.22	2.66	0.45	5.02	0.90	7.07
5	Female	Well Below	46.12	16.51	40.68	13.53	36.55	12.66
		Below	23.56	19.88	28.90	20.98	28.44	16.46
		Meets	27.94	50.88	27.87	50.98	32.09	54.55
		Exceeds	1.84	8.39	1.75	9.45	1.70	9.75
		Distinguish	0.54	4.34	0.80	5.06	1.22	6.59
	Male	Well Below	51.64	18.16	46.78	15.29	42.19	12.52
		Below	24.30	18.93	25.37	19.38	26.94	17.44
		Meets	22.43	48.35	26.24	50.17	28.32	52.83
		Exceeds	1.25	9.49	1.46	9.76	1.74	9.19
		Distinguish	0.39	5.07	0.15	5.40	0.80	8.02

Table 8b
Comparisons of Performance Levels between Black and White Students by Gender

			1998		1999		2000	
Grade	Gender	Performance Level	Black %	White %	Black %	White %	Black %	White %
8	Female	Well Below	67.30	33.91	62.30	30.79	57.77	25.80
		Below	17.62	22.67	23.71	26.89	25.83	27.46
		Meets	12.70	26.47	12.62	27.78	13.61	31.35
		Exceeds	1.72	7.95	0.96	6.31	1.93	7.43
		Distinguish	0.66	8.99	0.40	8.23	0.85	7.96
	Male	Well Below	70.14	33.92	69.03	31.16	61.11	24.30
		Below	16.56	19.49	17.58	23.46	21.99	23.40
		Meets	10.59	28.13	11.05	29.00	13.93	32.93
		Exceeds	1.51	8.08	1.53	7.52	1.67	8.63
		Distinguish	1.19	10.37	0.81	8.86	1.29	10.75
10	Female	Well Below	67.56	35.12	63.45	32.62	63.32	31.65
		Below	21.15	27.19	25.79	31.66	23.08	27.38
		Meets	9.14	23.81	9.00	25.30	11.22	26.57
		Exceeds	1.13	5.91	1.21	4.02	1.55	6.37
		Distinguish	1.03	7.96	0.56	6.40	0.82	8.02
	Male	Well Below	74.19	39.51	69.11	36.26	68.94	30.64
		Below	14.84	23.08	20.96	25.07	19.64	25.42
		Meets	8.13	22.34	8.44	24.21	9.17	25.50
		Exceeds	1.63	5.40	0.56	4.60	1.12	6.06
		Distinguish	1.22	9.66	0.93	9.84	1.12	12.39

Table 8c
Comparisons of Performance Levels between Black and White Students by Gender

			1998		1999		2000	
		Performance	Black	White	Black	White	Black	White
Grade	Gender	Level	%	%	%	%	%	%
3	Female	Well Below	11.99	6.08	24.15	8.86	18.17	9.35
		Below	37.75	25.17	38.30	28.95	51.17	44.13
		Meets	48.66	63.04	36.89	58.90	30.42	45.28
		Exceeds	1.52	5.38	0.67	3.04	0.23	1.07
		Distinguish	0.09	0.33		0.25	0.00	0.17
	Male	Well Below	26.92	14.60	36.96	17.95	30.13	18.54
		Below	40.00	33.67	38.32	33.22	49.60	47.74
		Meets	32.41	50.16	24.55	47.22	20.19	33.45
		Exceeds	0.68	1.37	0.17	1.47	0.08	0.27
		Distinguish	0.00	0.20	0.00	0.15	0.00	0.00
5	Female	Well Below	20.73	8.24	18.28	7.20	31.66	15.12
		Below	43.40	30.30	40.54	27.07	39.19	37.61
		Meets	32.66	50.89	37.74	56.93	28.16	44.47
		Exceeds	2.88	9.78	3.26	8.47	0.99	2.63
		Distinguish	0.34	0.79	0.18	0.33	0.00	0.17
	Male	Well Below	35.66	16.65	33.33	16.28	46.57	32.35
		Below	43.38	39.51	38.79	37.04	38.66	38.57
		Meets	19.94	39.02	26.91	42.76	14.32	28.19
		Exceeds	1.01	4.49	0.97	3.85	0.44	0.85
		Distinguish	0.00	0.33	0.00	0.07	0.00	0.04

Table 8c

Comparisons of Performance Levels between Black and White Students by Gender

Grade	Gender	Performance Level	1998 Black %	1998 White %	1999 Black %	1999 White %	2000 Black %	2000 White %
8	Female	Well Below	16.39	6.00	15.53	6.77	17.70	6.72
		Below	33.56	22.33	40.64	28.40	42.96	28.44
		Meets	43.89	55.18	42.28	58.59	38.77	62.13
		Exceeds	5.90	15.50	1.29	6.08	0.58	2.51
		Distinguish	0.26	0.98	0.26	0.15	0.00	0.19
	Male	Well Below	30.35	17.25	34.99	19.22	28.64	14.11
		Below	39.93	33.02	40.04	37.33	45.40	38.85
		Meets	27.84	43.25	24.39	41.09	25.69	45.76
		Exceeds	1.88	6.08	0.58	2.18	0.28	1.21
		Distinguish	0.00	0.40	0.00	0.18	0.00	0.07
10	Female	Well Below	26.49	10.51	30.15	15.95	20.35	9.95
		Below	43.71	37.37	39.06	36.08	38.36	30.06
		Meets	28.70	49.03	28.86	43.84	39.82	53.72
		Exceeds	1.10	3.08	1.93	4.01	1.46	5.86
		Distinguish	0.00	0.00	0.00	0.13	0.00	0.41
	Male	Well Below	44.36	27.11	46.05	30.55	36.06	20.76
		Below	41.49	43.60	36.26	37.31	38.50	37.24
		Meets	13.43	28.24	17.31	29.05	25.00	38.46
		Exceeds	0.72	1.00	0.25	2.83	0.44	3.50
		Distinguish	0.00	0.04	0.13	0.25		0.04